HABS No. ILL-1051

Manhattan Building 431 South Dearborn Street; southeast corner of South Dearborn Street and Congress Street Chicago Cook County Illinois

> HABS ILL, 16-CHIG, 53-

PHOTOGRAPHS WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Washington Planning and Service Center
1730 North Lynn Street
Arlington, Virginia

HISTORIC AMERICAN BUILDINGS SURVEY

HABS No. ILL-1051 HARS

MANHATTAN BUILDING

ILL. 16-CHIG. 53-

Location:

431 South Dearborn Street: southeast corner of South Dearborn Street and Congress Street, Chicago, Cook

County, Illinois.

Present Owner:

Alan B. Fuller.

Present Use:

Office Building.

Statement of Significance: The building is an example of the work of William LeBaron Jenney, the man credited with the invention It is important because of skeletal construction. of its remarkable structural system, which Randall describes as follows: "There is one basement, and the building is supported on spread foundations with beam and rail grillages. The building is true skeleton construction, with no use of party walls, the north and south walls of tile being supported upon steel cantilevers carrying the load back to the first row of interior columns. The columns are of cast iron, and the beams and girders of wrought iron with 'no steel in the building, Bessemer beams being still too expensive.' It was the 'first building to recognize a system of wind-bracing as a necessity (Mundie, William J. Skeleton Construction, 1932.)'." Frank A. Randall, History of the Development of Building Construction in Chicago (Urbana: The University of Illinois Press, 1949), p. 120/.

PART I. HISTORICAL INFORMATION

A Physical History:

Original and subsequent owners: Legal description of the property: Lots 13, 18, 19, in T. G. Wright's Subdivision of Block 138 in School Section Addition to Chicago of Section 16-39-14. Ante-Fire.

The following is based on the chain of title contained in Book 468A, pp. 210, 211, 164-165, in the Cook County Recorder's Office:

Parcels of the land on which the Manhattan Building now stands were owned by several parties: lot 19, owned by John C. Haines (Document 24048, April 12, 1872); lot 13, by Mary Young (Document 41332, July 5, 1872); and Levi Z. Leiter gained control of lot 18 from the Moses Weil family (Documents 747719-747721, 748391, November 14, 1884).

Charles C. Heisen, who was to build the Manhattan, signed a party wall agreement with Charles G. Smith for a wall on the south line of lot 19 on September 14, 1886 (Document 752814). On March 29, 1889, Heisen received the title of the south one-half of lot 19 from Smith, (Document 1079060); the north one-half was received from Polemus D. Hamilton on May 2, 1889 (Document 1094262), Levi Leiter sold lot 18 to Heisen on June 5, 1889 (Document 1111139). Mary Young leased lot 13 to Heisen on September 10, 1889 (Document 1153591), and sold it to him later, on August 6, 1891 (Document 1516469). Heisen, in turn, sold the entire land parcel to George H. Holt (Document 2626366, December 13, 1897). The property was listed in Holt's inventory, dated May 4, 1925 (Document 229/298); it was then passed on to Ellen Holt et al., who transferred the deed to the Manhattan Dearborn Corporation on February 2, 1955 (Document 16139509). The Corporation transferred the title to the present owner, Alan B. Fuller, as of the last entry, dated May 28, 1956 (Document 16593436).

- 2. Date of erection: 1889-1891 /Carl W. Condit, The Chicago School of Architecture (Chicago: The University of Chicago Press, 1964), p. 90/.
- 3. Architect: William LeBaron Jenney; Louis E. Ritter, assistant engineer, responsible for the framing system.
- 4. Original plan and construction: The original building permit, # 1696, dated June 7, 1889, in Book F, October 1888 July 1891, p. 60 Department of Buildings, Chicago, records the following information: "9 & 16 story office building, 150' front, 66' deep, ___high, 307/21 Dearborn, \$176.80--amt. for permit."

Condit, <u>loc</u>. <u>cit</u>. gives the following description: "The frame of this structure is carried on the usual spread footings of concrete reinforced with steel rails. The unit load transmitted by the footing to hardpan is 3,000 pounds per square foot. The exterior facing of the front and rear elevations is gray granite up to the fifth story and pressed brick and terra cotta above. The building originally consisted of a central block, twelve stories high, flanked by two nine-story wings. Four additional stories were added a few years after completion, making it the first sixteen-story building in the world" See Condit for a further discussion of the framing system, wind bracing, and the cantilevering of the outer bays of the side elevations.

See Supplemental Material for several early descriptions of the building.

B. Historical Events and Persons Connected with Structure:

There are no important historical events or persons connected with the building, aside from its famous architect-engineer, Jenney.

- C. Bibliography:
 - Condit, Carl W. The Chicago School of Architecture. Chicago: The University of Chicago Press, 1964. pp. 67, 84, 91-92, 122, 152, 219, Figs. 52-54.
 - Gilbert, Paul and Bryson, Charles Lee. Chicago and Its Makers. Chicago: Felix Mendelsohn, Publisher, 1929. p. 560 (photo).
 - Harpers Weekly, Special Chicago Number. New York: Harper & Bros., 1902.

 Picture p. 14 north on Dearborn Str., includes Old Colony and Fisher Buildings.
 - Industrial Chicago. Chicago: The Goodspeed Publishing Company, 1891. Vol. 1, pp. 216-217 -- description; Vol. 2, f.p. 458 -- line cut of exterior.
 - <u>Inland Architect</u>. Vol. 13 (July, 1889). p. 104, pl. fol. p. 106.
 - Microfilm of drawings for the Manhattan Building. Roll 9, frames 54-83. Burnham Library in the Art Institute of Chicago.
 - Randall, Frank A. <u>History of the Development of Building Construction in Chicago</u>. Urbana: The University of Illinois Press, 1949. p. 120, photograph p. 119.
 - Tallmadge, Thomas E. Architecture in Old Chicago. Chicago: The University of Chicago Press, 1949. pp. 131, 200.
 - Van Osdel, John Mills. <u>A Quarter Century of Chicago Architecture</u>. Chicago: R. E. Swift & Co., 1895. Picture.
- D. Supplemental Material:
 - 1. Inland Architect, op. cit., p. 104.

"The Manhattan office building for C. C. Heisen, fronting on Dearborn Street and Third Avenue, Chicago: W. L. B. Jenney architect, Chicago. The building has two fronts, each 150 feet in length, and a depth of about 68 feet, situated between party walls. On the north is a building occupied by printers, in the basement of which are three boilers against the party wall, furnishing power for the steam presses, and

on the south a fine office building. The basement is rented for stores or shops. To have carried these party walls the sixteen stories, would have necessitated the removal of the boilers and the building of new foundations under each of the walls, requiring the use of each of the adjacent basements for some months, and from the necessities of the case entailing a very large expense, particularly the removal of the boilers, depriving that building of power until they could be reset. To overcome these difficulties the party walls are used for but little more than their present height, and the upper portion of the building carried on the inner partition walls of the end stories. The building is throughout a skeleton of steel, fire proofed, the columns in each pier extending to the footings. The elevators are four in number situated in the center of the building. The offices and stores occupy the entire street fronts, with the sole exception of the entrance ways, giving a large proportion of rentable space."

2. Industrial Chicago, pp. 216-217:

"The Manhattan, fronting on Dearborn Street and Third Avenue, south of Van Buren Street, is the pioneer of the sixteen-story-and-basement buildings of Chicago, being 150 x 68 feet ground area and two hundred and four feet in height. It was designed in May, 1890, by W. L. B. Jenney for C. C. Heissen and completed in the summer of 1891. The architect applied to the Manhattan the perfected system, known as 'the Chicago construction,' first introduced by him in the Home Insurance building in 1884. This system enabled him to give each square foot of surface its highest carrying capacity of three thousand pounds, while presenting a building giving the appearance of fourteen thousand pounds per square foot. The use of iron pillars, resting on heavy foundations of concrete and iron rails, rendered such a structure possible, for, were stone and brick used in quantity to support more than ten stories, a settlement would be inevitable. In the Manhattan, lying between partwalls, eight stories high at the north and south, on which no additional weight could be placed, the cantalever /sic/ principal /sic/ was employed. The floor weights on the north and south wings of the building, for nine stories in height \(\sic \), are carried on heavy fifteen-inch cantalever beams. The first row of columns, at either end of the building, being only fifteen feet from the party walls. no weights rest upon such walls. Thus, high engineering skill and the close calculations implied in such a term, mark the construction. Its architectural features are the double fronts, faced with gray granite to the fifth story and with light pressed-brick and terra cotta to the sixteenth story. From the tenth story to the sixteenth the building sets back from the substructure fifteen feet on

the north and south, showing glazed tile and walls, but holds its width east and west. The fact of its extension between two business streets afforded the architect an opportunity to give natural light to every room, and he took advantage of such opportunity. Copper bays resting on cabels or artistic modillions, and extending from the third to the tenth story at each end and to the thirteenth story in the center, abolish the undressed appearance peculiar to extraordinarily high houses and give to the Manhattan an airy, lightsome look exteriorly, which the interior upholds. Bronze and antique copper embellishments, mosaic floors, ornamental ceilings, polished marble and jasper wainscoting, large stairways and all the belongings of a great modern building are found here. The basement is devoted to elevator, heating and electric light machinery and to mercantile uses. The first floor is given up to the grand entrances, corridors and stores. From the hall five swift elevators run to the top, a pneumatic tube connects with the Board of Trade, the possibilities of fire have been conquered, and a tenant of the Manhattan may boast the advantages undreamed of by the emperors, and princelings of Europe."

3. Tallmadge, op. cit., pp. 191, 200:

"... Next is the Manhattan Building, Jenney and Mundie architects. William B. Mundie told me that that was the first building in Chicago with party walls supported by the steel skeleton, in other words the first complete skeleton construction, It was sixteen stories in its central portion, with nine-story wings which were carried on cantilevers. . . Elmer Jensen, a partner of Major Jenney, the architect of the building, tells me that the Manhattan Building, still standing on the East side of Dearborn between Van Buren and Harrison, was the first skyscraper in which all the walls, fronts sides and rear are carried on the steel frame. dustrial Chicago says much the same thing when it states that the architect used the perfected system known as "Chicago construction" first introduced by him in the Home Insurance building in 1884. The Manhattan is peculiar in that it has two side wings nine stories high and a central shaft sixteen stories high. As it was designed in 1890 and completed in 1891, before the invention of concrete piers down to solid rock, the Major was evidently fearful that what the Auditorium did to the Studebaker (Fine Arts) Building he might do to the eight-story neighbors on each side. But he took an extra precaution and supported the lot line walls with cantilevers, steel arms that stretched out from within - a famous feat of engineering. The style of the Manhattan is Romanesque, with a sequence of 1-2-6-1-3-4-1-. A curious relationship, but one of the best buildings the Major did."

Prepared by Larry J. Homolka
Historian
National Park Service
J. William Rudd
Supervisory Architect
National Park Service
October 1964

PART II. ARCHITECTURAL INFORMATION

- A. Physical History:
 - 1. Architectural character: This building, the tallest in the world at the time of construction, was the first structure to make use of wind-bracing for the skeleton frame.
 - 2. Condition of fabric: Good.
- B. Description of Exterior:
 - 1. Number of stories: Sixteen stories; the end (north and south) bays are ten stories. Nine bays on east and west fronts.
 - 2. Layout-shape: Rectangular.
 - 3. Wall construction, finish, color: Gray granite through third floor. Pressed brick and terra cotta detail ornament above on east and west fronts. Rounded projecting bay with two windows located in north 3 and south 3 bays of west front. They extend from the fourth to the eighth floors. The three center bays of the west front are three sided projecting bays with 3 windows per projecting bay. The three center bays are supported on brackets at the 4th floor and carry through the eleventh floor. The three center bays, the north bay and the south bay of the east side of the building have three sided projecting bays with three windows per projecting bay. The north and south bays carry from the 4th through the 8th floor and the three center bays carry from the 4th through the 11th floor.
 - 4. Structural system: Wrought-and cast-iron skeleton frame.
 - 5. Openings:
 - a. Doorways and doors: The main entrance on west (South Dearborn Street) has been remodeled; the secondary entrance on the east (Plymouth Place) is original.
 - b. Windows: Display windows on first floor. One-over-one-light double-hung windows on second through six-

teenth floors on east and west fronts.

6. Roof:

- a. Shape, covering: Flat, built-up.
- b. Cornice, eaves: Shallow corbelled brick cornice.
 Terra cotta string courses at sills of fourth, nineth,
 tenth. thirteenth and sixteenth floors.

C. Description of the Interior:

1. Floor plans:

- a. Basement: Storage and mechanical equipment.
- b. First floor: Shops and elevator lobby.
- c. Floors 2 through 16: Rental offices.
- 2. Stairways: One stairway, first through the 16th floor is located in the center of the building behind (east) of the 5 elevator shafts. There is one stair to the basement located in the south section of the building.
- 3. Flooring: Floors in circulation space are marble; in most cases office floors are either linoleum or carpet.
- 4. Wall and ceiling finish: Plaster, painted. Marble wainscote in circulation areas except for wooden panelling in remodeled elevator lobby.
- 5. Doorways and doors: Two small square panels in lower one-third of door. Glass panel in upper two-thirds of door. Glass transoms above all doors.
- 6. Notable Hardware: Very ornate escutcheon and knob with a sinuous vine and floral motif.
- 7. Lighting: Electrical.
- 8. Heating: Central.

D. Site:

General setting and orientation: The building faces Dearborn Street on the west and Plymouth Court on the east. It is located in the center of the block between Van Buren Street and Congress Street just outside the south edge of Chicago's "Loop."